UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

MAR 17 2011

MEMORANDUM

SUBJECT: Request for a Time-Critical Removal Action at US Oil Recovery (US Oil Recovery property and affiliated MCC property), Pasadena, Texas.

FROM: Adam Adams, On-Scene Coordinator
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THRU: for Ragan Broyles, Associate Director
Prevention and Response Branch (6SF-P)

TO: Samuel Coleman, P.E., Director
Superfund Division (6SF)

I. PURPOSE

This Memorandum requests the approval of a time-critical removal action in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9604, at the U.S. Oil Recovery (USOR) and MCC Recycling (MCC) properties (collectively, the Site), both located in Pasadena, Texas. The general scope of the removal action will be to remove and dispose of hazardous substances that were abandoned in June of 2010 at the two properties within the Site and which have been the source of previous and on-going emergency response actions to stabilize the Site. Hazardous substances, pollutants, or contaminants have been found in above ground storage tanks, totes, drums, roll-off box containers, containment areas, secondary containment areas, a retention pond, parking lots, a bioreactor, and throughout the former waste water treatment facility.

The action described in this memorandum meets the criteria for initiating a removal action under Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415 (b)(2). This time-critical removal action is expected to exceed the statutory $2 million limit and the twelve month statutory limit for removal actions.

The first action at this Site was initiated under the On-Scene Coordinator's $250,000 authority, Chapter 14, Number 2, and subsequent Regional Delegation, R6-14-2, on July 2, 2010. Later on July 2, 2010, the Regional Removal Allowance Ceiling was raised by verbal approval from the Superfund Division Director to $1,100,000. In response to a second incident at this Site in November of 2010, the Regional Removal Allowance Ceiling was raised by verbal approval from the Superfund Division Director to $1,600,000. In January 2011, a response to a third incident was conducted under the second action with no funding increase.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS NO:	TXR000051540 (USOR Property), and TXR000079409 (MCC Property)
Category of Removal:	Time-Critical Removal
Site ID NO:	A6X7
Latitude:	29.7177400° North
Longitude:	-95.2210530° West

A. Site Description

1. Removal Site Evaluation

The Site formerly accepted and pretreated municipal and industrial Class I and Class II wastewater, characteristically hazardous waste, used oil and oily sludges, and municipal solid waste before it was abandoned in June of 2010. The approximate 18-acre Site consists of two properties that are, according to the property owner via the July, 2010 court-appointed Receivership (Trustee), connected by piping. The Site is located on both sides of Vince Bayou just south of the Houston Ship Channel at 400 North Richey and 200 North Richey in Pasadena, Texas. Hazardous substances, pollutants, or contaminants have been detected by sampling or field screening in drums, totes, above ground storage tanks (ASTs), containments, secondary containments, roll-off containers, the retention pond, bioreactor, parking lots, and most significantly in the runoff from the facilities.

The Harris County Public Health and Environmental Services (HCPHES) and Texas Commission on Environmental Quality (TCEQ) contacted the National Response Center (NRC) and Environmental Protection Agency (EPA) hotline and On-Scene Coordinator (OSC) and requested assistance in stabilizing the US Oil Recovery (USOR) and MCC Recycling (MCC) properties in managing a large volume of contaminated waste water that was being released from the Site and draining to the adjacent Vince Bayou (*See* Attachment 5 for NRC Reports 946255, 946854, and 959001) on July 1, 2010 and November 4, 2010. The OSC activated START-3 contractors to conduct preliminary assessments. Upon arrival at the Site, the OSC met with representatives from TCEQ and HCPHES, gained access to the Site from the property owner and Receivership, found the properties without restriction to public access and open roll-off containers labeled "Hazardous Waste...'09," and activated Emergency Rapid Response Services (ERRS) contractors to respond and stabilize the Site. The ASTs, secondary containments, and bays/containments had visible hydrocarbon contamination, some with pH levels less than pH 2. Drums and totes were found unorganized, mislabeled, adjacent to incompatibles, or stored with incompatible contents.

Historical inspections/investigations conducted by the HCPHES and the TCEQ have shown elevated levels of benzene and chlorinated solvents in some of the waste stored onsite. Specific hazardous substances found at the property by the EPA include, but are not limited to flammables (D001), corrosives (D002), arsenic (D004), barium (D005), cadmium (D006), chromium (D007), lead (D008), mercury (D009), selenium (D010), silver (D011), benzene (D018), chloroform (D022), 1,2-dichloroethane (D028), methyl ethyl ketone (D035), tetrachloroethylene (D039), trichloroethylene (D040), acetone, and hydrogen sulfide.

The USOR property includes 225 (25 cubic yard) roll-off containers, approximately 797 (55 gallon) drums, approximately 212 (300 to 400 gallon) totes, approximately 24 (1,000 to 30,000 gallon) above-ground storage tanks (AST's) in varying degrees of operability located outside on the north end of the facility with secondary containments, an approximate 300,000 gallon capacity dual cell bioreactor in poor condition located on the northwest side of the property with approximately 3 to 4 feet of material (liquids, sludges, and solids) and structural damage (reportedly from March-April 2009), 2 (20,000 gallon) frac tanks in good condition, a large full retention pond on the west side of the property, and a parking lot with standing water between the office and the warehouse.

The MCC Recycling property operated out of the USOR property, but was located on both sides of Vince Bayou just southeast across the railroad tracks from USOR. The northeast section of MCC consisted of 2 clarifiers, 2 oxygen digesters, an oxygen activation sludge unit, an oxygen plant, a chlorination building, a lift station (1), a gravity thickener, an aerobic digester, a belt filter press building, a pump control room, and a chlorine contact tank (basin/concrete containment area). The southwest section of MCC consisted of a high rate trickling filter, an oil-water separator, a primary clarifier, a final clarifier, and lift stations (2). Additional fixtures are present at MCC but not listed (i.e. a documents building, etc.).

No USOR or MCC representatives or employees have been onsite or available to the responding EPA representatives prior to, during, or upon completion of the EPA emergency response efforts that were initiated in July and November of 2010, with the only exceptions being by phone on July 2, 2010, and the Receivership since his appointment in July 2010. Initial access was granted on July 2, 2010 to the EPA and contractors verbally by the property owner and hard copy by the property owner's counsel. Upon court appointment of the Receivership later in July of 2010, access was granted by and coordinated with the Receivership.

2. Physical Location

The USOR and MCC Recycling properties are respectively located at 400 North Richey Street and 200 North Richey Street in Pasadena, Texas 77506 (*See* Attachments 1 and 2). The GPS location is Latitude: 29.7177400 North, Longitude: -95.2210530 West. The Site's

topography is such that it flows from both properties into the adjacent Vince Bayou, which is directly connected to the Houston Ship Channel.

3. Site Characteristics

The Site includes a warehouse, retention pond, and several containment areas throughout. USOR and/or MCC received municipal and industrial Class I and Class II wastewater, characteristically hazardous waste, used oil and oily sludges, and municipal solid waste. The Site is located in the City of Pasadena, which had a population of approximately 146,000 in July 2009. The population within 1 square mile of the site, according to the 2000 Census, was 1,131. The MCC property borders commercial businesses on each side, but also is split into two by Vince Bayou. There are homes within 500 feet and 250 feet of the USOR and MCC properties, respectively.

4. Release or Threatened Release into the Environment of a Hazardous Substance or Pollutant or Contaminant.

Preliminary assessments of the Site on July 2, 2010, November 9, 2010, and January 25 identified the historic or on-going release and threat of release of hazardous substances from the Site. Results from field screening and sample analyses indicate substances found in drums, totes, tanks, roll-off containers, the retention pond, containments, secondary containments, and runoff contain hazardous substances as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 40 C.F.R. § 302.4.

USOR containments (sumps 34, 35, and 36), AST's, and secondary containments were visibly overflowing following significant rain events in July and November of 2010, and again in January of 2011. Per the Receivership, this occurred twice between early August and October 19, 2010. Additionally, overflow liquids drain into the standing water at the parking lot and then down gradient into Vince Bayou. Field screening of the runoff from sumps 34, 35, and 36 indicated a pH less than 2. Samples collected from the sludge in the north tank farm measured benzene at 3.75 milligrams per Liter (mg/L) and methyl ethyl ketone at 0.695 mg/L. Hydrogen sulfide was measured in the north tank farm liquids shipped for disposal/fuels blending at over 2,000 ppm.

The MCC property had liquid runoff from the chlorine contact tank (containment area). During the July 2010 incident response, analytical results from the seepage just outside the chlorine contact tank (WW02) measured acetone at 14,000 µg/L, benzene at 46.4 µg/L, toluene at 258 µg/L, ethyl benzene at 757 µg/L, methyl ethyl ketone at 198 µg/L, and xylene at 4,320 µg/L. The seepage sample was later confirmed to be originating from a faulty concrete reconfiguration in the chlorine contact tank (also referred to as the "Z-tank" due to the

configuration) at the west corner. The sample was collected from an uncontrolled discharge with no facility oversight.

Upon arrival at the USOR property for the November incident response, corrosive caustic drums and totes inside the warehouse were found damaged with contents spilled. Drums and totes were found segregated as they had been left following the July 2010 incident response, with the exceptions being the few drums and totes that had failed while the facility had no routine oversight or monitoring. The following table provides drum and tote assessment results from the July incident response in which the drums and totes had been inventoried, field screened/ hazard characterization analyzed, segregated, and staged with signage:

Classification	Drum	Overpack	Tote	Count Subtotal
Combustible	45	1	9	55
Combustible, Corrosive Acid	2	-	-	2
Corrosive Acid	36	-	9	45
Corrosive Base	12	1	7	20
Empty	6	-	1	7
Flammable	339	16	62	417
Flammable, Corrosive Acid	4	-	2	6
Flammable, Corrosive Base	3	-	2	5
Non-corrosive	1	-	-	1
Non-flammable	128	4	40	172
Non-flammable, Non-corrosive	175	3	74	252
Not Tested	11	-	-	11
Potential H2S	-	-	1	1
Potential Oxidizer	-	-	5	5
	762	25	212	999

Further releases to the environment can occur if the hazardous substances are not removed from the Site. Without routine oversight and monitoring of the properties, there is a potential for future releases. Chemicals identified in drums, totes, tanks, roll-off containers, the retention pond, bioreactor, containments, secondary containments, and runoff are hazardous substances as defined in Section 101(14) of CERCLA, 42 U.S.C. §9601(14) and 40 C.F.R. §302.4.

5. NPL Status

This site is being evaluated for possible listing on the National Priorities List at the time of this Action Memorandum.

6. Maps, Pictures and Other Graphic Representations

Attachment 1:	Site Location Map
Attachment 2:	A. Aerial Site Map
	B. USOR Property Map
	C. USOR Property Aerial Map
	D. USOR Property Sampling Location / Overland Flow Map
	E. MCC Property Map
	F. MCC Property Aerial Map
	G. MCC Property Sampling Location / Overland Flow Map
Attachment 3:	Enforcement Attachment (Enforcement Confidential/FOIA Exempt).
Attachment 4:	Summary Tables of Sample Analytical Results
Attachment 5:	NRC Reports
Attachment 6:	ATSDR Sheets
Attachment 7:	EJ Reports
Attachment 8:	Scope of Work

B. Other Actions to Date

1. Previous Actions

Prior to this Time-Critical Removal Action, EPA has responded with emergency response contractors to stabilize the Site in July 2010, November 2010, and January 2011. During these emergency response efforts, the EPA has stabilized the Site by containing migration of contamination from the Site, removing large volumes of containment liquids to prevent overflow and runoff, conducting field screening/modified hazard characterization analyses of drums and totes for appropriate staging and segregation, over-packing faulty drums, repairing or replacing roll-off container tarps to prevent overflow, repairing damaged fencing, replacing locks on gates, installing signage, and washing secondary containments and bays to prevent future overflow of contamination. EPA has repeatedly dropped the levels in the secondary containments and bays and removed liquids and sludges with a pH less than 2 and benzene-contaminated sludges to also prevent overflow of contamination.

Prior to the July 2010 incident response, EPA's involvement with USOR and MCC consisted of assigning an identification number to the USOR property in 2003 and conducting multimedia investigations in 2009. EPA Resource Conservation and Recovery Act (RCRA) and Water Enforcement Program Teams submitted an information request to USOR/MCC in January 2010, and issued a Cease and Desist Administrative Order for Clean Water Act (CWA) violations in April 2010. A RCRA Section 7003 Unilateral Administrative Order (UAO) was issued to USOR/MCC and the owner in June 2010.

2. Current Actions

Currently, under the emergency response initiated in November of 2010, the OSC is on standby with contractors to respond to contain and mitigate any discharges of hazardous substances as needed, pending prior notification by the Receivership (Trustee), the local TCEQ and/or HCPHES by the appropriate mechanisms.

C. State and Local Authorities' Roles

1. State and Local Actions to Date

According to a RCRA Subtitle C Identification form, the owner of USOR became the owner of the USOR property in January 2002 and made initial notification to TCEQ of regulated waste activity (used oil) in 2003. An EPA identification number was assigned in February 2003, and USOR made notifications as a hazardous waste transporter and conditionally exempt small quantity generator (CESQG) in 2004. TCEQ and HCPHES have jointly been investigating and/or responding to community complaints involving USOR since as early as December 2005 and MCC Recycling as early as 2009. In December of 2008, the owner of USOR acquired a decommissioned waste water treatment plant ("WWTP") located at 200 N Richey that was previously owned/operated by the City of Pasadena. MCC was established to pre-treat wastewater generated by USOR before discharge to the City of Pasadena publicly-owned treatment water ("POTW") facility. A summary of TCEQ and HCPHES investigations and response activities are summarized below.

TCEQ Region 12 – Houston Office, Waste Section, Industrial and Hazardous Waste (IHW) Complaint Investigation and Case Development Investigations (CDI) conducted numerous investigations at USOR and MCC Recycling. Specific citations from TCEQ investigations are listed below:

- Failure to operate according to permits (i.e. not properly labeled operating units in accordance with TCEQ permits, failure to ensure containerized waste was stored in the appropriate locations)
- Failure to obtain RCRA permits for storing hazardous waste received from off-site generators.
- Failure to obtain a RCRA permit for the storage of hazardous waste in drummed waste, Bio-Reactor and roll-off boxes for greater than 90 days.
- Improper record keeping. Waste acceptance logs did not match waste disposal logs. During investigations waste acceptance logs would indicate specific volumes of

material onsite that would not match what was actually onsite. Waste disposal logs could not be tracked back to waste acceptance logs.

- Improper material storage/ management (i.e. failed to limit storage of waste to only those wastes specified in the permit, failure to maintain adequate spacing between rows of double stacked containers, containers freely leaking, and not keeping containers closed or covered).
- Failed to prevent the discharge or imminent threat of discharge of industrial solid waste or municipal hazardous waste into or adjacent to the water in the state without obtaining specific authorization for such a discharge from the TCEQ.
- Failure to create/maintain adequate secondary containment around operating units.
- Failure to receive prior authorization from the TCEQ Air Permits Section to conduct aeration of wastewater containing volatile organics stored within the Bio-Reactor. USOR failed to modify the permit to reflect this change in operation.

From 2004 to 2009, Harris County HCPHES Environmental Public Health Division (EPH) documented violations regarding nuisance odors, wastewater discharges, contaminated storm water discharges, and failure to obtain an air permit. Since May 2009, EPH has documented numerous violations and expressed concerns regarding both properties. Violations included wastewater discharges, contaminated storm water discharges, odor nuisances, permit violations (USOR), lack of appropriate permits/authorizations (USOR/MCC), hazardous waste storage/processing, and spills. Concerns included structural integrity of tanks at both USOR (bioreactors, at least two storage tanks) and MCC (tanks and piping in general), concerns about fire hazards (facility has been without water or electric at times), and concerns about additional spills and discharges to nearby Vince Bayou. EPH sought relief in the courts via a series of Temporary Restraining Orders and Temporary Injunctions issued in 2009 and 2010; however, most of the violations continued unabated despite the court's orders. In June 2010, an investigator from EPH observed that process equipment had been removed from both facilities and also observed that many tanks, secondary containments, and containers were near to overflowing. On July 1 and November 4, EPH investigators observed discharges from the USOR property during and after a heavy rain. EPH notified the NRC of the observed discharges and the potential of hazardous substances within the discharge. On July 2, an EPH investigator reported that the facility appeared to be abandoned.

2. Potential for Continued State/Local Response

The EPA, HCHPES, and TCEQ will continue to have involvement with the Site until the hazardous substances have been removed and disposed of properly. In the event the Site has

future incidents prior to or during the removal and disposal of hazardous substances, the NRC and EPA hotlines will be notified accordingly by the local representatives.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a removal action. Paragraphs (b)(2)(i), (iii), (v), (vi), and (vii) directly apply to the conditions at the Site. Any one of these factors may be sufficient to determine whether a removal action is appropriate.

A. Threats to Public Health or Welfare

1. Exposure to Human Populations, Animals or the Food Chain, NCP Section 300.415(b)(2)(i);

The predominant threat to human populations, animals or the food chain was and is the potential for exposure by direct contact with volatile organic compounds (benzene, hydrogen sulfide, etc.), flammables, corrosives, and unknowns in the containments, tanks, drums, totes, retention pond, bioreactor, and roll-off containers. Containments, ASTs, roll-off containers, and the retention pond have overflowed into the parking lot and into Vince Bayou. The Site is not operated or monitored daily or even weekly by anyone, and containers and containments can fail resulting in spillage into the parking lot and further into Vince Bayou. Spillage can also result in reactions and fire. Routes of exposure exist from direct contact with skin, eyes, and mucous membranes with the leaking material; inhalation of vapors emanating from the containers, containments, and AST's; and ingestion of runoff water and possibly Vince Bayou water. Some specific hazardous substances, detections, health results from exposure, and routes of exposure are listed below (this list is not all inclusive in respect to the hazardous substances, the concentrations, or the health results from exposure):

Acetone: 14 milligrams per Liter (mg/L); uncontrolled releases from the MCC property; skin irritation and damage, smell and respiratory irritation, headaches, unconsciousness, coma; inhalation, ingestion, and skin contact;

Benzene: 3.75 mg/L; seepage from the MCC property chlorine contact tank and the USOR property north tank farm sludge; headaches, unconsciousness, death, effects to the blood and immune system, and is a carcinogen; inhalation, ingestion, and skin contact;

Ethyl benzene: 0.757 mg/L; uncontrolled releases from the MCC property; eye and throat irritation, dizziness, and is a possible carcinogen; inhalation, ingestion, and skin contact;

Toluene: 0.258 mg/L; uncontrolled releases from the MCC property; confusion, memory loss, loss of hearing, loss of appetite, loss of color vision, dizziness, unconsciousness, death, and possible kidney damage; inhalation, ingestion, and skin contact;

Xylene: 4.32 mg/L; uncontrolled releases from the MCC property; headaches, dizziness, confusion, loss of sense of balance, irritation of the skin, eyes, nose, and throat, difficulty breathing, lung problems, delayed reaction time, memory difficulties, possible damage to liver and kidneys, unconsciousness, and death; inhalation, ingestion, and skin contact;

Methyl ethyl ketone (2 Butanone): 0.695 mg/L; the USOR property north tank farm sludge and uncontrolled releases from the MCC property; irritation of the nose, throat, skin, and eyes, birth defects, unconsciousness, and death; inhalation, ingestion, and skin contact; and

Hydrogen sulfide: over 2,000 ppm; the USOR property north tank farm; nasal symptoms, sore throat, cough, impaired lung functions, damage to olfactory epithelium, loss of smell; inhalation.

2. Hazardous Substances or Pollutants or Contaminants in Drums, Barrels, Tanks, or Other Bulk Storage Containers That May Pose a Threat of Release. NCP Section 300.415(b)(2)(iii);

Upon arrival at the Site by EPA during the July 2010 incident response, 797 (55 gallon) drums, 212 (300 to 400 gallon) totes, and 225 (25 cubic yard) roll-off containers were found staged throughout the Site in no particular organization. Containers (drums and totes) inside the warehouse had shown little indication of segregation, spacing, and stability. Upon field hazard characterization spot checking, many of the containers had labeling and markings other than the results of the field screening / hazard characterization analyses. Also, incompatibles (acids and bases) were found adjacent to each other. Corrosives ($10 < pH < 2$) were found in rusted metal drums in poor condition. Flammables were found in drums labeled "Non-Regulated" or "Universal Waste" or with no markings. Bulging drums were found throughout the warehouse. Many of the roll-off containers needed tarps, bows, poles, or repairs to prevent filling up and over flowing given a significant rain event, as what occurred on July 2, 2010.

Additionally, there are approximately 24 AST's (1,000 to 30,000 gallon) located on the north end of the USOR property. They contain various hazardous substances to include benzene (3.75 mg/L), methyl ethyl ketone (0.695 mg/L), corrosives ($10 < pH < 2$), and hydrogen sulfide (over 2,000 ppm). Some of the AST's have seepages, low level valves, and low level access points. It would be very easy for an untrained individual to walk into the USOR north tank farm with no protection, open a valve a few feet off the ground, and become smothered and engulfed in hydrogen sulfide IDLH conditions (NIOSH IDLH is 100 ppm for hydrogen sulfide), liquids, and sludges. During the November 2010 incident response, hydrogen sulfide was measured in the north tank farm liquids shipped for disposal/fuels blending at levels ranging over 2,000 ppm.

3. Weather Conditions That May Cause the Release or Migration of Hazardous Substances, NCP Section 300.415(b)(2)(v);

Pasadena, Texas is subject to several types of extreme weather conditions that could cause the release of hazardous substances, such as flooding, hurricanes, high winds, and significant rain events, such as the one that occurred on July 2, 2010 raising Vince Bayou over its banks and covering North Richey Street with approximately 4 to 4.5 feet of water in a matter of only 3 hours. At the height of this rain event, Vince Bayou was only approximately 25 feet from the facility fence line. Significant rains cause overflow of the facility retention pond, containments, secondary containments, and unloading bays, which all contain hazardous substances (i.e. acetone, benzene, ethyl benzene, methyl ethyl ketone, toluene, xylene) and hazardous flammable and corrosive substances which drain to Vince Bayou approximately 25 to 150 feet away depending on the height of the Vince Bayou water level. The facility is not operated or monitored routinely, and a small release or leak can turn into a significant incident given extreme weather conditions.

4. Threat of Fire or Explosion, NCP Section 300.415 (b)(2)(vi);

Facility tanks, drums, and totes contain flammable liquids, which when not managed appropriately could result in fire and/or explosion. Also with the Site not being operated or monitored routinely and the cold weather months, it's easily conceivable that persons might seek shelter from the cold weather in the facility structures. Untrained persons living amongst the containers and containments can set fires to warm themselves and inadvertently cause an uncontrolled fire. A fire could cause the release of hazardous substances at the Site and put responding fire fighters and neighboring businesses and residents in jeopardy of exposure.

5. Availability of Other Response Mechanisms, NCP Section 300.415(b)(2)(vii)

Upon a release, assistance would not or will not otherwise be provided in a timely basis, because the State of Texas, Harris County, and local governments do not have the resources to deal with a site of this complexity or magnitude. The Site was referred to the EPA by both TCEQ and HCPHES.

C. Threats to the Environment.

Runoff from the site has the potential of contaminating the nearby Vince Bayou. A release of hazardous substances from this site would, therefore, impact the ecosystem of the drainage pathway offsite.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances, pollutants or contaminants from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

V. ACTIONS TAKEN / PROPOSED AND ESTIMATED COSTS

A. Actions Taken / Proposed

1. Action Description

a. Actions Taken.

Access was requested initially and granted on July 2, 2010 and confirmed again on November 8, 2010 to initiate an EPA emergency assessment and response. This site has had two EPA emergency response actions initiated in July and November of 2010. Both response efforts included containment of hazardous substances, pollutants, or contaminants; mitigation of the threat of release; preliminary assessment of Site conditions, and stabilization of the Site to protect human health and the environment.

Containment efforts included the use of booms and absorbent pads, use of pumps and vacuum trucks, and shipment of liquids for disposal/fuels blending. Mitigation actions included dropping containment content levels to below overflow threat levels or emptying, drum and tote management and staging, and containment spray washing where needed and practical. Stabilization actions include assessing site conditions, securing the Site and containers, and mitigating any potential threats.

Due to the large volume of some contained contaminated materials or the continued contact with storm water, some liquids and sludges were removed from the Site. Contaminated site liquids that accumulated from overflowing containments, secondary containments, unloading bays, leaking drums and totes, and the parking lot were shipped offsite and disposed of at the Inter Gulf Corporation property in Pasadena, Texas. Some of the liquids were neutralized to bring the pH above pH 2.0 for disposal property acceptance. Some liquids required treatment to address significant hydrogen sulfide levels prior to disposal property acceptance. Drums and totes inside the warehouse were managed to continue appropriate segregation and containment. Containments and secondary containments that are open to the elements were emptied of liquids and sludges to minimize future storm water contact, overflow, and offsite migration. Sludges

were sampled, transported, and disposed of accordingly at the Waste Management facility in Conroe, Texas and the US Ecology facility in Robstown, Texas, respectively.

All disposal was and will be in accordance with EPA's Offsite Rule, 40 CFR § 300.440, and CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and all transportation was in accordance with Department of Transportation (DOT) rules and regulations.

Waste Stream	Disposal Facility	Incident Occurrence	Volume/Weight
Hazardous Sludge (Benzene)	US Ecology	Incident 2	11,751 gallons
Hazardous Sludge Washout (Benzene)	US Ecology	Incident 2	5 drums
Nonhazardous Sludge	Waste Management	Incident 2	89.36 tons
PPE/Solids/IDW	Waste Management	Incident 2	10 cubic yards
Nonhazardous liquids	Intergulf	Incident 1	393,500 gallons
Nonhazardous liquids	Intergulf	Incident 2	410,000 gallons
Nonhazardous liquids	Intergulf	Incident 3	30,000 gallons
Nonhazardous liquids	Intergulf	Total	833,500 gallons

Other requirements under the Occupational Safety and Health Act (OSHA) of 1970, 29 U.S.C. § 651 et seq., and under the laws of a State with an approved equivalent worker safety program, as well as other applicable safety and health requirements, were followed. Federal OSHA requirements include, among other things, Hazardous Materials Operation, 20 CFR Part 1910, as amended by 54 Fed. Reg. 9317 (March 1989), all OSHA General Industry (29 CFR Part 1910) and Construction (29 CFR Part 1926) standards wherever they are relevant, as well as OSHA record-keeping and reporting regulations, and the EPA regulations set forth in 40 CFR Part 300 relating to the conduct of work at Superfund sites.

b. Actions Proposed.

The Scope of Work (*See* Attachment 8), of this action includes three phases of action to remove the hazardous substances, pollutants, or contaminants to protect public health and the environment:

i. Site monitoring, maintenance, and containment of hazardous substances, pollutants, and contaminants from migrating off the property and exposing public health and the environment. This includes disposal if needed.

ii. Assessment of all hazardous substances, pollutants, and

contaminants from the Site (not to include subsurface assessment).

iii. Removal and disposal of all hazardous substances, pollutants, and contaminants at the Site.

2. Contribution to Remedial Performance

The emergency response actions and this time-critical action are consistent with any conceivable remedial responses at this Site.

3. Description of Alternative Technologies

The proposed action includes removal and disposal of the chemical wastes that pose the highest risk to public health. No alternative technologies can be applied to these portions of the action.

4. Applicable or Relevant and Appropriate Requirements (ARAR)

This removal action is and was conducted to eliminate the actual or potential exposure to hazardous substances, pollutants or contaminants to the environment, pursuant to CERCLA, 42 U.S.C. § 9601 et seq., and in a manner consistent with the National Contingency Plan (NCP), 40 CFR Part 300, as required at 33 U.S.C. § 1321(c)(2) and 42 U.S.C. § 9605. Pursuant to 40 CFR Part 300.415(j), fund-financed removal actions under CERCLA § 104 and removal actions pursuant to CERCLA § 106 shall, to the extent practicable considering the exigencies of the situation, attain the applicable or relevant and appropriate requirements under Federal environmental law including but not limited to, Toxic Substances Control Act (TCSA), 15 U.S.C. Section 2601 et seq., Clean Air Act (CAA), 42 U.S.C. Section 7401 et seq., Solid Waste Disposal Act (SWDA), 40 U.S.C. Section 6901 et seq., the Resource Conservation and Recovery Act RCRA, 42 U.S.C. Section 6901 et seq., Fish and Wildlife Coordination Act (FWCA) 16 U.S.C. Section 661 et seq., Hazardous Materials Transportation Act (HMTA) 49 U.S.C. Section 1801 et seq., or any promulgated standard, applicable or relevant and appropriate requirements, criteria or limitations under a State environmental or facility citing law that is more stringent than any Federal standard, requirement, criteria, or limitation contained in a program approved, authorized or delegated by the Administrator and identified to the President by the State.

The DOT regulations contain requirements for transportation of hazardous materials, including hazardous wastes, to locations offsite. All hazardous substances, pollutants, or contaminants removed offsite for treatment, storage, or disposal are, were and will be treated, stored, or disposed of at a facility in compliance, as determined by EPA, pursuant to CERCLA

Section 121(d)(3), 42 U.S.C. Section 121(d)(3), and the following rule: "Amendment to the National Oil and Hazardous Substances Pollution Contingency Plan; Procedures for Planning and Implementing Offsite Response Action: Final Rule," 58 FR 49200 (September 22, 1993), and codified at 40 CFR § 300.440."

The Resource Conservation and Recovery Act (RCRA) waste analysis requirements found at 40 CFR § 261.20 and 261.30, RCRA's manifesting requirements found at 40 CFR § 262.20, and RCRA packaging and labeling requirements found at 40 CFR § 262.30 are ARARs for this removal action. Because onsite storage of hazardous wastes exceeded ninety days once the Site was transferred to the Receivership on August 2, 2010, RCRA storage requirements found at 40 CFR § 265 were, are and will be adhered to regarding drum and tote staging, segregation, containment, and signage.

5. Schedule

There have been three incidents at the Site. The initial incident occurred in July of 2010, the second in November of 2010, and the third in January of 2011.

During the first incident response, the EPA obtained access through written and verbal means from the PRP and PRP's counsel and initiated an emergency assessment and classic emergency removal action at the Site on July 2, 2010. The final shipment of waste was conducted on July 30. Demobilization of onsite equipment and frac tanks was conducted on August 2, 2010.

The second incident response activation took place on November 8, 2010. Access was confirmed from the Receivership prior to arrival at the Site. Final shipment of waste was conducted on January 6, 2011, and the Site was secured and stabilized for demobilization on January 7, 2011.

The third incident response activation took place on January 25, 2011. Access was confirmed from the Receivership prior to arrival at the Site. Final shipment of waste was conducted on February 5, 2011.

In the event a new incident occurs at the Site prior to commencement of PRP removal actions; the PRP(s)/Receivership, HCPHES, or TCEQ will contact the NRC and EPA hotlines and OSC appropriately.

B. Estimated Costs

This time-critical action is expected to be performed by the PRP(s) at an estimated cost of less than $6,000,000. Current extramural costs relative to emergency response actions follow:

Extramural Costs:	Initial Ceiling:	11/08/10 Increase:	Current Increase:	Current Ceiling:
Regional Allowance Costs:				
ERRS	$1,100,000	$500,000	$0	$1,600,000
Other Extramural Costs Not Funded From the Regional Allowance:				
START	$200,000	$50,000	$425,000	$675,000
Subtotal, Extramural Costs:	$1,300,000	$550,000	$425,000	$2,275,000
Extramural Costs Contingency:	$0	$139,000	$36,000	$175,000
TOTAL EXTRAMURAL COSTS:	**$1,300,000**	**$689,000**	**$461,000**	**$2,450,000**

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If these response actions are not taken at the Site, adjacent residents and workers will continue to be in danger of being exposed to hazardous substances that have and continue to be released at the unmaintained, unmonitored, and abandoned Site. As cited above, such exposure could possibly lead to adverse health effects including coma and death.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this Site.

VIII. ENFORCEMENT

Based on full-cost accounting practices, the total costs incurred for this removal act that will be eligible for cost recovery are estimated to be $ 3,815,353.

(Direct Cost) + (Other Direct) + (42.63% of Total Direct [Indirect Cost) = Estimated EPA Cost for a Removal Action

$ 2,450,000 + $225,000 + (42.63% x ($2,450,000 + $ 225,000)) = $3,815,353

Direct costs include direct extramural costs and direct intramural costs. Indirect co calculated based on an estimated indirect cost rate expressed as a percentage of site-specifi direct costs, consistent with the full cost accounting methodology effective October 2, 200: These estimates do not include pre-judgment interest, do not take into account other enforc costs, including Department of Justice costs, and may be adjusted during the course of a re action. The estimates are for illustrative purposes only, and their use is not intended to cre any rights for responsible parties. Neither the lack of a total cost estimate nor the deviatior actual total costs from this estimate will affect the United States' right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected removal action for the U.S. Oil Rec (USOR) and MCC properties (collectively, the Site), both located in Pasadena, Texas, dev in accordance with CERCLA, 42 U.S.C. § 9601 et seq., and not inconsistent with the NCP C.F.R. Part 300. This decision is based on the administrative record for the Site.

Conditions at the Site meet the criteria as defined by Section 300.415(b) (2) of the I 40 C.F.R. § 300.415(b) (2), for a removal, and I recommend your formal approval of the documented removal action. The total project ceiling is **$ 2,450,000.00**. Of this, an estima **$1,600,000** (without contingency) is from the Regional Removal Allowance.

Approved: _____ Date: 3/17/11

Samuel Coleman, P.E., Director
Superfund Division